

# **NASA Small Aircraft Transportation System (SATS)**

## **Information Exchange Workshop**

At the 81<sup>st</sup> Annual Meeting of the [Transportation Research Board](#)  
Washington, D.C. – January 13, 2002

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**Date and Time:** Sunday, January 13, 2002; 1:30pm - 5:00pm

**Place:** Omni Shoreham Hotel, 2500 Calvert Street, NW, Hampton Room; TRB Conference, Washington, DC 20008

**TRB Sponsor:** AJ-107 Airport and Aircraft Compatibility Committee, **Chair:** Dr. Michael T. McNerney

**Presiding:** Dr. Bruce Holmes, Manager, General Aviation Programs Office, [NASA Langley Research Center](#), Hampton, VA.

**Contact:** Mr. Ken Stackpoole, 386-226-6123, [stackpoole@db.erau.edu](mailto:stackpoole@db.erau.edu)

**Purpose:** To provide the larger transportation research community an opportunity to learn about the NASA Small Aircraft Transportation System Research and Development (SATS) Program. SATS leadership will report on plans to develop and prove SATS operating capabilities. Comments and participation from the transportation research community is invited on all aspects of the program, particularly those that impact the broader transportation community.

**Summary:** The Small Aircraft Transportation System Program (SATS), a research and development program managed by NASA Langley Research Center General Aviation Programs Office, could enable a safe travel alternative, freeing people, goods, and services from transportation delays by creating access to more communities in less time. Specific technologies and operating capabilities were conceived to support on-demand distributed air mobility services as convenient and cost effective alternatives to highway or airline travel within a 500-mile radius of home. Newer general aviation aircraft, equipped with new technology, could access at least ten times as many small airports as the major airline systems and could do so in near all-weather conditions at speeds up to four times greater than speeds of automobiles.

Increased access to more destinations by air holds great potential for a safe, on-demand, near all-weather, affordable, easy-to-use, resilient, distributed transportation system. The SATS five-year research and development program leads to a set of valid, reliable flight experiments and a practical demonstration of four key operating capabilities. The demonstration will be designed to prove that the SATS concept works in the current National Airspace System. The operating capabilities, once demonstrated, will open the technological window to access hundreds of underutilized airports and underused airspace. We envision a safe inter-modal system that integrates air and ground systems to enable doorstep-to-destination distributed mobility. Please join us as we present the SATS Research and Development Program to the national transportation research community. We solicit your input to help refine the program designed to prove new concepts for 21<sup>st</sup> Century Transportation Alternatives.

### **Agenda:**

1:30 – SATS Overview and Discussion of Objectives for Workshop – **Dr. Bruce Holmes**

2:00 – Presentation of SATS Projects and challenges/questions for breakout sessions

- **Ms. Sally Johnson** – Airborne Enabling Technologies Project
- **Mr. Jerry Hefner** – Transportation System Analysis and Assessment Project
- **Mr. John White** – Technology Integration and Flight Experiments Project

3:00 – Breakout into working groups

- Airborne Enabling Technologies with Industry Facilitator, TBD
  - Flightpath Management
  - Flight Deck Technologies
  - Communication/Navigation/Surveillance Technologies
- Transportation System Analysis and Assessment with DOT Facilitator, TBD
  - Transportation System Analysis Modeling and Tools
  - Market Response Field Trial Project Design
- Technology Integration and Flight Experiments with FAA Facilitator, TBD
  - Flight Test Operations
  - Aircraft, Airspace Integration
  - 2005 Demonstration Integration

4:15 – Plenary Report by Working Groups

4:45 – Closing Remarks and Adjourn

For more information, contact [Ken Stackpoole](#). Note: TRB on-line registration is open at <http://www4.trb.org/trb/annual.nsf>